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AMENDMENTS TO THE CLAIMS

Please replace all prior versions and listings of claims with the amended claims as follows:

1. (Previously presented) A compound of formula (I):

$$\begin{array}{c|c}
 & \text{HIV} & \text{Ar_1} \\
 & \text{N} & \text{N} \\
 & \text{R}^2 & \text{R}^3
\end{array}$$

or a pharmaceutically acceptable salt thereof, wherein:

R1 and R2 are each independently R, halogen, CN, NO2, or TR;

T is an optionally substituted C₁-C₄ all:ylidene chain wherein up to two methylene units of T are optionally and independently replaced by O, N(R), C(O), S, SO, or SO₂;

Arl is

wherein each occurrence of QR⁵ is, independently, CH₂halogen, halogen, CH₂CN, CN, CH₂CO₂R', CO₂R', CH₂COR', COR', R', CH₂NO₂, NO₂, CH₂OR', OR', CH₂SR', SR', haloalkyl, CH₂SO₂N(R')₂, SO₂N(R')₂, CH₂N(R')₂, N(R')₂, NHCOR', CH₂NHCOR', CH₂PO(OR')₂, PO(OR')₂;

R³ and R⁴ are each independently Z-R⁷, or R³ and R⁴ are taken together to form an optionally substituted saturated, partially unsaturated, or fully unsaturated 3-8 membered ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur wherein said ring is optionally substituted with 0-5 independent occurrences of Y-R⁸;

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each occurrence of Q, Z, and Y is independently a bond or an optionally substituted C₁-C₆ alkylidene chain wherein up to two non-adjacent methylene units of Q and up to three non-adjacent methylene units of Z are optionally replaced by CO, CO₂, COCO, CONR, OCONR, NRNR, NRNRCO, NRCO, NRCO₂, NRCONR, SO, SO₂, NRSO₂, SO₂NR, NRSO₂NR, O, S, or NR;

each occurrence of R⁵, R⁷ and R⁸ is independently R', halogen, NO₂, CN, OR', SR', N(R')₂, NR'C(O)R', NR'C(O)N(R')₂, NR'CO₂R', C(O)R', CO₂R', OC(O)R', C(O)N(R')₂, OC(O)N(R')₂, SOR', SO₂R', SO₂N(R')₂, NR'SO₂R', NR'SO₂N(R')₂, PO(OR')₂, C(O)C(O)R', or C(O)CH₂C(O)R'; and

each occurrence of R is independently hydrogen or an optionally substituted C₁₋₆ aliphatic group; and each occurrence of R' is independently hydrogen or an optionally substituted group selected from C₁₋₈ aliphatic, C₆₋₁₀ aryl, a heteroaryl ring having 5-10 ring atoms, or a heterocyclyl ring having 3-10 ring atoms, or wherein two occurrences of R and R' taken together or two occurrences of R' taken together, form an optionally substituted saturated, partially unsaturated, or fully unsaturated 3-8 membered ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur;

provided that R³ and R⁴ are not simultaneously hydrogen.

2-6. (Canceled)

- 7. (Previously presented) The compound of claim 1, wherein both occurrences of Q-R⁵ are methyl.
- 8. (Previously presented) The compound of claim 1, wherein at least one occurrence of Q-R⁵ is CF₃.
- 9. (Original) The compound of claim 1, wherein Q-R⁵ substituents on Ar¹ are fluoro, iodo, chloro, bromo, COCH₃, CO₂CH₃, C₁₋₄alkyl, NH₂, CH₂NH₂, NHMe,

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CH₂NHMe, N(Me)₂, CH₂N(Me)₂, N(Et)₂, CH₂N(Et)₂, NH(phenyl), CO(C₁₋₄alkyl), CH₂CO(C₁₋₄alkyl), NHCO(C₁₋₄alkyl), CH₂NHCO(C₁₋₄alkyl), CN, CH₂CN, OH, C₁₋₄alkoxy, optionally substituted benzyloxy, optionally substituted phenyloxy, CF₃, SO₂NH₂, SO₂NHMe, optionally substituted SO₂(phenyl), SO₂(C₁₋₄alkyl), CONH₂, CH₂PO(OR')₂, or an optionally substituted group selected from a saturated, partially unsaturated, or fully unsaturated 5- or 6-membered ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur.

- 10. (Previously presented) The compound of claim 1, wherein R¹ and R² groups of formula I are each independently hydrogen, N(R)₂, SR, or OR.
- 11. (Previously presented) The compound of claim 1, wherein R¹ and R² groups are each independently hydrogen, OH, CH₃, CH₂CH₃, OCH₃, CH₂OH, CH₂OCH₃, CH₂NHCH₃, NH₂, or CH₂NH₂.
- 12. (Previously presented) The compound of claim 1, wherein R³ and R⁴ are each independently Z-R⁷ wherein Z is a bond or an optionally substituted C₁₋₄ alkylidene chain wherein one methylene unit of Z is optionally replaced by O, NR, NRCO, NRCO₂, NRSO₂, CONR, C(O), C(O)O, and wherein R⁷ is selected from halogen, CN, N(R')₂, NHCOR', or R'.
- 13. (Currently amended) The compound of claim 1, wherein R³ and R⁴ are each independently hydrogen, CN, halogen, OH, SH, NH₂, CO₂H, COH, CONH₂, SO₂NH₂, NO₂, or (CH₂)_nNRR⁷, wherein R and R⁷, taken together with the nitrogen atom to which they are bound, form an optionally substituted 3-8-membered saturated or partially unsaturated ring having 1-3 heteroatoms selected from nitrogen, oxygen, or sulfur, and n is 0, 1, 2, 3, 4, or 5.

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14. (Previously presented) The compound of claim 1, wherein one of R³ or R⁴ is hydrogen, and the other of R³ or R⁴ is $(CH_2)_n OR^7$, $(CH_2)_n NRR^7$, $(CH_2)_n C(O)R^7$ ($CH_2)_n CH_3$, or $(CH_2)_n SR^7$, wherein R⁷ is hydrogen, $(CH_2)_m N(R^3)_2$, C_1 -C₄alkyl, an optionally substituted 5- or 6-membered aryl or heteroaryl, wherein each of n and m is 0 or 1, or R and R⁷, taken together with the nitrogen atom to which they are bound form an optionally substituted 3-8-membered saturated or partially unsaturated ring having 1-3 heteroatoms selected from nitrogen, oxygen, or sulfur.

- 15. (Original) The compound of claim 14, wherein R³ is hydrogen.
- 16. (Original) The compound of claim 14, wherein R⁴ is hydrogen.
- 17. (Original) The compound of claim 1, wherein R³ and R⁴, taken together with the atoms to which they are bound, form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5- or 6-membered ring having 0-3 heteroatoms independently selected from nitrogen, oxygen, or sulfur, and wherein said ring is optionally substituted with 0, 1, 2, 3, 4, or 5 occurrences of Y-R⁸.
- 18. (Original) The compound of claim 17, wherein each occurrence of Y-R⁸ is independently methyl, ethyl, t-butyl, fluoro, chloro, bromo, oxo, CF₃, OMe, OEt, CN, SO₂Me, SO₂NH₂, NH₂, NHMe, N(Me)₂, SMe, SEt, OH, C(O)Me, NO₂, or CH₂OH.

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19. (Currently amended) The compound of claim 1, having one of formulas I-A-i, I-A-ii, I-B-ii, I-C-i, I-C-ii, I-D-i, or I-E-i:

wherein q is 0-5 and n is 0 or 1.

I-E-i

I-D-i

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20-30. (Canceled)

- 31. (Previously presented) The compound of claim 19, wherein R³ is Z-R⁷, wherein Z is a bond or is an optionally substituted C₁₋₄ alkylidene chain wherein one methylene unit of Z is optionally replaced by O, NR, NRCO, NRCO₂, NRSO₂, CONR, C(O), C(O)O, and wherein R⁷ is halogen, CN, N(R')₂, NHCOR', or R'.
- 32. (Currently amended) The compound of claim 19, wherein R^3 is $(CH_2)_nOR^7$, $(CH_2)_nNRR^7$, $(CH_2)_nC(O)R^7$ ($CH_2)_nCH_3$, or $(CH_2)_nSR^7$, wherein R^7 is hydrogen, $(CH_2)_mN(R^2)_2$, C_1 - C_4 alkyl, an optionally substituted 5- or 6-membered aryl or heteroaryl, wherein each of n and m is 0 or 1, or R and R^7 , taken together with the nitrogen atom to which they are bound form an optionally substituted 3-8-membered saturated or partially unsaturated ring having 1-3 heteroatoms selected from nitrogen, oxygen, or sulfur, wherein n is 0 or 1[[,]] and m is 0 or 1.
- 33. (Previously presented) The compound of claim 19, wherein Z is a bond or is an optionally substituted $C_{1\cdot4}$ alkylidene chain wherein one methylene unit of Z is optionally replaced by O, NR, NRCO, NRCO₂, NRSO₂, CONR, C(O), C(O)O, and wherein R^7 is selected from halogen, CN, N(R')₂, NHCOR', or R'.
- 34. (Currently amended) The compound of claim 19, wherein R⁴ is $(CH_2)_nOR^7$, $(CH_2)_nNRR^7$, $(CH_2)_nC(O)R^7$ ($CH_2)_nCH_3$, or $(CH_2)_nSR^7$, wherein R⁷ is hydrogen, $(CH_2)_mN(R^2)_2$, C_1 -C₄alkyl, in optionally substituted 5- or 6-membered aryl or heteroaryl, wherein each of n and m is 0 or 1, or R and R⁷, taken together with the nitrogen atom to which they are bound form an optionally substituted 3-8-membered saturated or partially unsaturated ring having 1-3 heteroatoms selected from nitrogen, oxygen, or sulfur, wherein n is 0 or 1[5] and m is 0 or 1.

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35. (Previously presented) The compound of claim 19, wherein q is 0, 1, or 2, and each occurrence of Y-R⁸ is independently methyl, ethyl, t-butyl, fluoro, chloro, bromo, oxo, CF₃, OMe, OEt, CN, SO₂lMe, SO₂NH₂, NH₂, NHMe, N(Me)₂, SMe, SEt, OH, C(O)Me, NO₂, or CH₂OH.

- 36. (Currently amended) The compound of claim 19, wherein compounds have one of formulas II-A-i, II-B-i, or II-C-i, and the compound variables are defined as:
- a) x is 0, 1, 2, or 3, and Q-R⁵ is CH₂halogen, halogen, CH₂CN, CN, CH₂CO₂R', CO₂R', CH₂COR', COR', R', CH₂NO₂, NO₂, CH₂OR', OR', CH₂SR', SR', haloalkyl, CH₂SO₂N(R')₂, SO₂N(R')₂, CH₂N(R')₂, N(R')₂, NHCOR', CH₂NHCOR', CH₂PO(OR')₂, PO(OR')₂, or Q-R⁵, taken together with the atoms to which they are bound, form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5-8-membered ring having 0-3 heteroatoms selected from nitrogen, oxygen, or sulfur;
- b) R¹ and R² are each independently hydrogen, N(R)₂, SR, OR, or TR, or R¹ and R², taken together form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5-membered ring having 0-2 heteroatoms independently selected from N, O, or S; and
- c) R³ is (CH₂)_nhalogen, (CH₂)_nCN, (CH₂)_nOR⁷, (CH₂)_nNRR⁷, (CH₂)_nC(O)R⁷, (CH₂)_nC(O)R² (CH₂)_nCH₃, (CH₂)_nC(O)NRR⁷, (CH₂)_nSR⁷, wherein R⁷ is (CH₂)_mN(R')₂, C₁-C₄alkyl, an optionally substituted 5- or 6-membered aryl, aralkyl, heteroaryl, or heteroaralkyl group, or R and R⁷, taken together with the nitrogen atom to which they are bound form an optionally substituted 3-8-membered saturated or partially unsaturated ring having 1-3 heteroatoms selected from nitrogen, oxygen, or sulfur, n is 0 or 1, and m is 0 or 1.

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37. (Currently amended) The compound of claim 19, wherein compounds have one of formulas II-A-ii, II-B-ii, cr II-C-ii, and one or more of the compound variables are defined as:

- a) x is 0, 1, 2, or 3, and Q-R⁵ is CH₂halogen, halogen, CH₂CN, CN, CH₂CO₂R', CO₂R', CH₂COR', COR', R', CH₂NO₂, NO₂, CH₂OR', OR', CH₂SR', SR', haloalkyl, CH₂SO₂N(R')₂, SO₂N(R')₂, CH₂N(R')₂, N(R')₂, NHCOR', CH₂NHCOR', CH₂PO(OR')₂, PO(OR')₂, or Q-R⁵, taken together with the atoms to which they are bound, form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5-8-membered ring having 0-3 heteroatoms selected from nitrogen, oxygen, or sulfur;
- b) R¹ and R² are each independently hydrogen, N(R)₂, SR, OR, or TR, or R¹ and R², taken together form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5-membered ring having 0-2 heteroatoms independently selected from N, O, or S; and
- c) R⁴ is (CH₂)_nhalogen, (CH₂)_nCN, (CH₂)_nOR⁷, (CH₂)_nNRR⁷, (CH₂)_nC(O)R⁷, (CH₂)_nC(O)R⁷ (CH₂)_nC(O)R⁷ (CH₂)_nC(O)RR⁷, (CH₂)_nSR⁷, wherein R⁷ is (CH₂)_mN(R')₂, C₁-C₄alkyl, an optionally substituted 5- or 6-membered aryl, aralkyl, heteroaryl, or heteroaralkyl group, or R and R⁷, taken together with the nitrogen atom to which they are bound form an optionally substituted 3-8-membered saturated or partially unsaturated ring having 1-3 heteroatoms selected from nitrogen, oxygen, or sulfur, n is 0 or 1, and m is 0 or 1.
- 38. (Previously presented) The compound of claim 19, wherein compounds have formula II-E-i, and one or more of the compound variables are defined as:
- a) x is 0, 1, 2, or 3, and Q-R⁵ is CH₂halogen, halogen, CH₂CN, CN, CH₂CO₂R', CO₂R', CH₂COR', COR', R', CH₂NO₂, NO₂, CH₂OR', OR', CH₂SR', SR', haloalkyl, CH₂SO₂N(R')₂, SO₂N(R')₂, CH₂N(R')₂, N(R')₂, NHCOR', CH₂NHCOR', CH₂PO(OR')₂, PO(OR')₂, or Q-R⁵, taken together with the atoms to which they are bound, form an optionally substituted saturated, partially unsaturated,

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or fully unsaturated 5-8-membered ring having 0-3 heteroatoms selected from nitrogen, oxygen, or sulfur;

- b) R¹ and R² are each independently hydrogen, N(R)₂, SR, OR, or TR, or R¹ and R², taken together form an optionally substituted saturated, partially unsaturated, or fully unsaturated 5-membered ring having 0-2 heteroatoms independently selected from N, O, or S; and
- c) q is 0, 1, or 2, and each occurrence of Y-R⁸ is independently methyl, ethyl, t-butyl, fluoro, chloro, bromo, oxo, CF₃, OMe, OEt, CN, SO₂Me, SO₂NH₂, NH₂, NHMe, N(Me)₂, SMe, SEt, OH, C(O)Me, NO₂, or CH₂OH.
- 39. (Previously presented) The compound of claim 19, The compound of claim 1, selected from:

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40. (Original) A composition comprising a compound of claim 1, and a pharmaceutically acceptable carrier, acjuvant, or vehicle.

41-43. (Canceled)

- 44. (Previously presented) A method of treating or lessening the severity of multiple sclerosis, lupus erythematosus, rheumatoid arthritis, or asthma in a patient, comprising the step of administering to said patient:
 - a) a composition of claim 40; or
 - b) a compound of claim 1.
 - 45. (Canceled)
- 46. (Currently amended) The method according to claim 44, wherein the disease is rheumatoid arthritis.
- 47. (Original) The method according to claim 44, wherein the disease is asthma.